

sumption of the oyster by the Indian tribes. The shell mounds discovered are of immense size, and the shells themselves reached a quite monstrous dimension; the animals were killed either by fire, or by smashing in the shell at the attachment of the adductor muscles, and possibly even by the opening of the shell by stone knives. In many localities north of Cape Cod, the disappearance of the oyster has been comparatively recent. Some ascribe this to the pollution of the water by mills, but Prof. Verrill thinks a change of climate may have had something to do with it. Oyster culture has been tried, but unsuccessfully, on this coast; a great business in "laying down" oysters is still carried on at Wellfleet.

Coming south of Cape Cod, we find Buzzard Bay and Vineyard Sound, early known for their fine beds of natural oysters. More than a century ago, strict regulations were made about their take and export, but these beds would seem to be nearly worked out.

The charter of Charles II. gave the colony of Rhode Island (1683) free fishing in every form. At one period large quantities of oysters were destroyed for the sake of the lime in their shells. Now statutes are in force specially guarding the mollusc, and the oysters are now yearly increasing in quantity and lessening in price, and over 960 acres of oyster-ground were let in Rhode Island in 1879. About one-half of the oysters raised are natives, and the other half are Virginia oysters brought to the grounds to be fattened. The probable amount of capital invested in this district may be about 1,000,000 dollars, and the yield and value as against this is about 600,000 dollars at wholesale prices.

The Virginia trade began some fifty years ago, when Capt Farran gathered a sloop-load of some 600 bushels. Now the profits of a single firm in 1856 were 25,000 dollars a year. When the native supply grew slack, very successful efforts at cultivation were made. Out of seven to eight thousand acres marked for oyster-culture in New Haven Harbour, only one-half are in use. One proprietor operates on 1500 acres, and full details of the various methods of culture adopted are given in this report.

Coming further south, the southern shore of Long Island was early famous for its oysters, and we know how the old blue point oysters were relished by the Dutch settlers. In 1833 they were sold for an average of ten shillings a hundred from the beds. In 1873 Count Pourtales called attention to their getting scarce, and since 1879 it has required an importation of 100,000 bushels of seed to keep up the supply. This seed then had only to be gathered, or was worth but little, now its price has increased threefold. The principal market now-a-days for these Blue Points is Europe. In the markets of London they commanded a high price, retaining their supremacy over all other sorts, until in 1879 when the season being a bad one, the oysters grown in Staten Island Sound surpassed them. Not only are they of a superior flavour, but they have a round thin shell, and are of a medium size. The Rockaway district supplies an immense quantity of oysters; it is but the western end of the south shore of Long Island. While most of the stock finds its way to New York, lately the oysters from this district have found their way into the European market, selling as "French" stock. In New York Bay the growth of transplanted oysters is fairly rapid, and a great many are sent from there to Europe. In New York City the oyster trade is of very considerable importance, which centres itself in two localities at the foot of Broome Street, East River, and of West Tenth Street, North River. The quantities handled each year in the city has been approximately estimated as about 765,000,000 oysters. A large number go to England, where the "Blue Points" having lost favour, the "East Rivers" and "Sounds" have taken, in a measure, their place. Between October 9, 1880, and May 14, 1881, being one season, there was exported from New York to Europe a total of 70,768 barrels, of which

68,140 barrels went to Liverpool. Each barrel contained on an average 1200 oysters.

Along the New Jersey shore a large quantity of oysters are raised, and the western shore of Delaware Bay is the scene of planting the southern oysters, which are brought annually from the Chesapeake, and are fattened for the markets of Philadelphia. This city is credited with an intake of oysters, amounting in 1880 to about 800,000,000, but then, unlike New York, this quantity is not wholly consumed in Philadelphia, but is in part distributed to the surrounding regions, but the calculation has been made that this million-peopled city consumes on an average during half the year, 300,000,000. The retail trade gives employment to over 3500 people.

The oyster fisheries of Maryland are among the most important in America, and it is claimed that the beds of Chesapeake Bay, about equally divided between the two States of Maryland and Virginia, contain the best oysters in the world. The oyster trade of this region is immense, giving employment to thousands. A body of police, with a steamer and two tenders, with eight sloops, watch hourly over the grounds, but the territory to be watched is so vast—the beds of Maryland extend for a distance of 125 miles—that the police sometimes fail to catch illegal dredgers, and serious encounters, as in the winter of 1879-80, have occurred.

It cannot be too often asserted that even the splendid beds of this district may, by unrestricted dredging, become exhausted. Properly protected and cared for, this wealth might be increased manyfold. Thirty years ago we read, the depletion of the beds at Pocomoke Sound and in Tangier seemed a thing impossible, now from want of a period of rest they have fallen off in their produce, the former by four-fifths, the latter by two-thirds. The statistics of this great fishery extends over many pages. It was at Baltimore the "steamed" oyster trade began, and this city, the great oyster market of the United States, packs more of this mollusc than any other city in the world.

In North Carolina the business in oysters and their culture is of small proportions, and not much is known of the fisheries of Georgia. Of the oyster interests in Florida there is little to be said. Coming to the Gulf of Mexico, the Mobile supply must be noted, as they have a high reputation for excellence. The New Orleans market is supplied from an extent of coast comprising the whole water front of North Mississippi and Louisiana.

Appended to this report there is a condensed account of the anatomy and development of the oyster, taken from the memoir of Dr. W. K. Brooks, of the John Hopkins University of Baltimore, and accompanied by a full series of drawings of the growth of the young oyster.

## NOTES

THE following is the list of names nominated for the Council of the Royal Society to be balloted for on November 30:—President, William Spottiswoode, M.A., D.C.L., LL.D. Treasurer, John Evans, D.C.L., LL.D. Secretaries: Prof. George Gabriel Stokes, M.A., D.C.L., LL.D., Prof. Michael Foster, M.A., M.D. Foreign Secretary, Prof. Alexander William Williamson, LL.D. Other Members of the Council: Prof. W. Grylls Adams, M.A., F.C.P.S., John Ball, M.A. F.R.A.S., Thomas Lauder Brunton, M.D., Sc.D., Prof. Heinrich Debus, Ph.D., F.C.S., Francis Galton, M.A., F.G.S., Prof. Olaus Henrici, Ph.D., Prof. Thomas Henry Huxley, LL.D., Prof. E. Ray Lankester, M.A., Prof. Joseph Lister, M.D., Prof. Joseph Prestwich, M.A., F.G.S., Prof. Osborne Reynolds, M.A., Prof. Henry Enfield Roscoe, B.A., LL.D., Marquis of Salisbury, K.G., M.A., Osbert Salvin, M.A., F.L.S., Warrington W. Smyth, M.A., F.G.S., Edward James Stone, M.A., F.R.A.S.

THE death is announced, at the early age of thirty-two years, of Prof. Marino Palmieri, Professor of Physics at Naples University, and so well known for his seismological researches. We hope to refer to Palmieri's work in an early number.

WE also regret to announce the death of Prof. J. Th. Reinhardt, Professor of Zoology at Copenhagen University and Inspector of the Natural History Museum of that city, an ornithologist of great merit; he died at Copenhagen on October 23, aged sixty-six. The death is also announced of Dr. F. H. Troschel, Professor of Zoology at Bonn, and of Dr. Julius Friedländer, the head of the well-known Berlin publishing house and scientific agency of that name.

PROF. VIRCHOW has had a serious attack of illness, but we are glad to learn from the latest intelligence that he is slightly better.

WE see from *The Gazette* of Montreal that the meeting held in that city on October 26, in connection with the proposed visit of the British Association to Canada in 1884, was large and influential. Much enthusiasm was displayed at the prospect of the Association's visit, and several resolutions were passed guaranteeing a hearty welcome and every provision for the success of the meeting, and the comfort and entertainment of the visitors. A large committee was appointed to carry out arrangements, and at the close of the meeting a considerable sum was subscribed as a guarantee fund. Dr. Sterry Hunt stated that in 1884 the American Association would probably meet at Newhaven, at such a time as to admit of the English visitors attending both meetings.

ON October 9 was unveiled, at the University town of Würzburg, a memorial to Von Siebold, the celebrated Oriental *savant*. For some years past the Horticultural Society of Vienna has collected subscriptions for this purpose, and it is interesting to note that a considerable sum was subscribed amongst the Japanese, although they have already erected a colossal stone to his memory at Nagasaki. Siebold was the greatest of all the students of Japan during what may be called the Dutch period, that is, from about 1620, when all Europeans except the Dutch were expelled from Japan, down to 1854, when Perry succeeded in making the first of the recent treaties with that country. During this time the facilities for the foreign student were few. The members of the Dutch factory were confined to the settlement at Deshima, which was about the size of a small London square; all egress, except on certain rare occasions, was denied to them, and this intercourse with the people was confined to the few interpreters and officials employed to watch their movements. Once a year the head of the factory, with a small suite, journeyed overland to Yedo with presents to the Shôgun; but while on the road the foreigners were as closely guarded as prisoners, and all opportunity of conversation or intercourse with the people was denied them. Notwithstanding these unpromising circumstances, however, Kaempfer, Titsingh, Thunberg, and especially Siebold, succeeded in obtaining the materials for works which will for years to come retain their position as the very best works in the country. About 1820 Siebold was appointed surgeon to the Dutch forces in Java, and in 1826 made his first voyage to Japan, where he became physician to the factory at Deshima. He seems first to have acquired a sound knowledge of the language, and then, through the native *employés*, to have procured books as he required them. For eight or ten years he remained quietly in Japan, accumulating vast stores of information for subsequent use, and journeying occasionally with the annual mission to Yedo. On his return to Europe he proceeded to publish his great works, "*Fauna Japonica*," and "*Flora Japonica*," the expenses of which were defrayed, we believe, by the King of the Netherlands. He again returned to Japan, and

was there during the signing of the American and other treaties, and was even in this early time constantly employed by the Japanese Government in advising them how to thread their way through the difficulties of their new position. On one of his previous journeys to Yedo he had received permission to reside there for a period, provided he taught western medicine to a number of Japanese students. He got into serious danger through having in his possession a complete native map of Japan, which one of his pupils had succeeded in conveying to him. The latter is said to have lost his life, and Siebold returned to Deshima. On his second return to Europe with his large collection of Japanese books, maps, specimens of the artistic productions of the country, of the fauna, flora, &c., he was received with honour by the Emperor of Russia and other European potentates. He then commenced the publication in parts of his *Magnum opus Nippon*, which he never lived to complete. This work might with much justice be styled the *Encyclopædia Japonica*. Besides native works, every book published in the East in European language was consulted. Whatever the labours of subsequent students, large sections of this book, such as the history of European discoveries in the Eastern seas, will always retain their value. After his death his vast collections were distributed among various museums on the Continent. The larger share, as was only natural, went to Leyden; but the British Museum succeeded in obtaining his splendid library of Japanese books and maps.

THE August number of the *Mittheilungen der deutschen Gesellschaft* of Yokohama contains several papers of much interest. The numerous and curious New Year's customs of Japan are described by Mr. Sataro Hirose, a native medical student, while Mr. Schült gives a topographical sketch of Mount Fugi and its neighbourhood. Dr. Scheube contributes a long paper on the food of the Japanese. He was enabled, in the college with which he is connected, to examine the food of various classes, and from his statistics, meat appears to play but a small part in the nourishment of the people. Rice occupies about 50 per cent. of their total diet. Dr. Baelz describes the various infectious diseases of Japan, and Mr. Leysner furnishes statistics for the past ten years of the climate of Niigata, the principal town on the West Coast. The number and value of the contributions of this small society—it numbers only forty-nine resident members—would be little short of astounding, did we not recollect that most of the Germans employed by the Japanese Government are men of scientific attainments, and devote much study to the country in which they live.

WE have received from M. Georges Dary, of Paris, a note commenting on Prof. S. Thompson's article upon Electric Navigation. M. Dary informs us that the source of power upon which M. Trouvé has fallen back is a bichromate (primary) battery weighing only 120 kilogrammes, or less than one-tenth of the accumulators used by Mr. Volckmar in the iron launch *Electricity*. This battery, M. Dary states, has an electromotive force of 96 volts—equal to that of the 45 accumulators—but he does not state what strength of current it will furnish, nor for how many hours. M. Dary adds that 500 similar apparatuses—he does not say whether this means 500 boats, or 500 batteries, or 500 motors—like that used by M. Trouvé in navigating the Seine in his skiff, have already been exported from Paris. This bichromate battery, it appears, has enabled M. Trouvé to undertake journeys which with little exaggeration may be called long voyages, as, for example, from Havre to Rouen; and there are numerous owners of electrical boats who run every day between places twelve or fourteen miles apart, using two sets of cells for the run. We are glad to be able to do so ingenious an inventor as M. Trouvé the justice of making more widely known the real progress which he has made in this matter.



A COLOSSAL statue of George Stephenson, and another of James Watt, both after models by Prof. Keil, are now being completed in the studio of the eminent German sculptor, Herr Bock, and are intended for the new Polytechnic at Charlottenburg, near Berlin.

THE comet was seen at the Paris Observatory by M. Bigourdan, one of the astronomers, on October 23. It was found to be very brilliant. The observation was presented by M. Mouchez, with two others done by M. Thollon at the Nice Observatory. The sodium lines, which were very brilliant on September 18, had wholly disappeared on October 9, when the comet was seen for the first time after a very long observation of the sky.

THE first meeting of the One Hundredth and Twenty-Ninth Session of the Society of Arts will be held on Wednesday, November 15, when the Opening Address will be delivered by Charles William Siemens, D.C.L., LL.D., F.R.S., Chairman of the Council. The following papers are announced for reading at the meetings before Christmas :—J. Hopkinson, D.Sc., F.R.S., Ice-making and Refrigerating; W. H. Preece, F.R.S., Electrical Exhibitions; William A. Gibbs, the Artificial Drying of Crops; P. L. Simmonds, the Utilisation of Waste; W. K. Burton, the Sanitary Inspection of Houses. For meetings after Christmas :—J. H. Evans, the Modern Lathe; Capt. J. H. Colomb, R.N., Collisions at Sea; A. J. Hipkins, the History of the Pianoforte; J. Donaldson, the Construction of Torpedo Boats; C. F. Cross, F.C.S., Technical Aspects of Lignification; W. N. Hartley, F.R.S.E., Self-purification of River Waters; James J. Dobbie, D.Sc., and John Hutchinson, the Application of Electrolysis to Bleaching and Printing." Arrangements have been made for Five Courses of Cantor Lectures :—On Dynamo-Electric Machinery, by Prof. Silvanus P. Thomson, D.Sc.; on Solid and Liquid Illuminating Agents, by Leopold Field; on the Decorative Treatment of Metal in Architecture, by G. H. Birch; on the Transmission of Energy, by Prof. Osborne Reynolds, M.A., F.R.S.; on Secondary Batteries, by Prof. Oliver J. Lodge, M.A., D.Sc. The usual short Course of Juvenile Lectures will be given during the Christmas holidays by Prof. Henry Nottidge Moseley, M.A., F.R.S., on the Inhabitants of the Ocean.

PROF. GEORGE M. MINCHIN will publish very shortly, at the Clarendon Press, a work on "Uniplanar Kinematics of Solids and Fluids, with Applications to the Distribution and Flow of Electricity." It aims at supplying a deficiency in the course of mathematical physics usually pursued by the higher-class students in our colleges and universities, by enabling them to enter into the study of kinetics with clear notions of acceleration and other leading conceptions which belong to the province of kinematics.

THE delegates of the Clarendon Press have determined to issue a series of translations of important original papers in foreign languages on biological subjects, and have committed the editing of these memoirs to Dr. Michael Foster, Dr. Pye-Smith, and Dr. Burdon Sanderson. It is proposed that the series should begin with a single volume of about 750 pages, to be divided into three parts: the first to comprise the treatise of Prof. Heidenhain on "The Physiology of the Process of Secretion"; the second a series of four papers by Prof. Goltz on "The Functions of the Brain," and a memoir by N. Bubnoff and Prof. Heidenhain on "Excitatory and Inhibitory Processes in the Motor Centres of the Brain"; and the third a series of memoirs by Prof. Engelmann on "The Structure and Physiology of the Elementary Contractile Tissues." It is intended that each part should be complete in itself, and should be published separately.

THE medical faculty of the Göttingen University has announced as a subject of prize competition, for 1883, a

thorough investigation with the more recent aids of microscopical art, of the mucous membrane of the bladder and urethra of both sexes, especially with reference to their gland-contents, and the varying forms of the epithelial cells in expansion of the ducts. The philosophical faculty propounds two subjects, one of which is an investigation and setting forth of the mode of development of the flower of our common mistletoe (*Viscum album*), with critical consideration of the literature of the subject.

MOUNT ETNA has for some days been showing great and increasing activity, emitting flashes of fire and dense volumes of smoke.

AN Arabic manuscript of the year 1365, from which Herr Gildemeister has translated several extracts for the Göttingen Society of Sciences, affords an interesting peep at nautical matters among the Arabians of those times. The author deals separately with the ships of the Mediterranean, of the Indian Ocean, and Red Sea, and of the Nile and other rivers. *Inter alia*, he describes a mariner's compass; and this is noteworthy, inasmuch as only one description of the instrument in an Arabian work has hitherto been known (it is of date 1242). The following is a curious picture :—"A ship [of the Indian Ocean] carries generally four divers, whose only duty is, when the water rises in the ship, to smear themselves with sesame oil, stop their nostrils with wax, and, while the ship is sailing, jump into the sea. Each has two hooks connected with a thin line; one of these he fixes in the wood of the ship, and with the other he dives. He swims like a fish a little under the water, and uses only his ear. Where he hears the trickling of water he stops with wax where there are holes, stopped with palm stems, and where there is sewing, he often passes a piece of cocoa fibre through the fixed palm stem. The thing is easy to him; in a day he stops over twenty or thirty leaks. The diver comes up, without inconvenience, whether there is wind or calm."

THREE new Lyceums, in which instruction will be given in Finnish, will be opened in a few weeks in Finland, at Abo, Uleaborg, and Björneborg, thus raising the number of Finnish Lyceums to eight. In the Helsingfors University, lectures in Finnish are delivered on all subjects in connection with the Archæology and History of the north, as also in Botany by Prof. Wainio.

M. W. DE FONVIELLE has just published (Hachette and Co.) a little volume on "La Pose du Premier Cable," in which the principal incidents connected with this great undertaking are told in a dramatic and popular manner.

MR. MUYBRIDGE has issued a series of his well-known instantaneous pictures of animals in motion, adapted for the zoetrope. Those sent to us include the horse under various conditions, the deer, and the dog. They are exact reproductions of the photographs, and in their faithfulness to reality are a great improvement on the existing zoetrope pictures. Mr. Muybridge is preparing for publication a complete series of his original photographs, adapted for his zoopraxiscope.

UNDER the title of "La Navigation Électrique" (Paris, Baudry), M. Georges Dary gives some interesting notes on electric navigation, with special reference to the experiments of M. Trouvé. Bemrose and Son have issued a little handbook, "The Electric Light Popularly Explained," by Mr. A. Bromley Holmes; and Macmillan and Co. a useful manual of "Electric Light Arithmetic," by Mr. R. E. Day, M.A.

THE Austrian Archæological Expedition to Asia Minor has returned to Vienna, and the objects found in the excavations made and packed in 167 cases have arrived there.

PROF. SIMONY has recently ascended the Dachstein in order to make some exact measurements concerning the decrease of

the Dachstein glaciers. He found that the so-called Karlseisfeld has since 1856 lost about 50-60 metres in thickness, the middle portion about 40-50 metres. The decrease in the thickness of the ice is most noticeable in the high and steep descent from the middle to the lower portion of this glacier. Here a piece of the glacier-bed—a rock of about 30 metres in height and 60 broad—has been laid quite bare. Up to 1856 the glaciers were steadily increasing, but since then the decrease has been equally incessant.

IN the ordinary air thermometer the pressure of the air in the thermometric bulb is generally measured by means of a mercury manometer. M. Schneebeli, of Zurich (*Archives des Sciences*), employs, instead of the latter, a metallic manometer, of the Hottinger-Goldschmidt system. The bulb of the thermometer terminates in a capillary tube, to which the manometer is connected by means of another capillary tube of lead. The space between the latter and the elastic membrane of the manometer is filled with glycerine. M. Schneebeli believes the arrangement capable of being really serviceable to industry, because of the simplicity of its construction and of the manipulations required. A mere reading of the position of the manometric pointer gives the temperature.

### OUR ASTRONOMICAL COLUMN

COMET 1882, *b*.—In consequence of cloudy mornings, it is stated that this comet was not seen at Melbourne until 5 a.m. on September 10; it was visible with the telescope till within one minute of sunrise, and its intrinsic brightness was estimated equal to that of the planet Jupiter. The tail was well defined and bright, but extending only over 3° or 4° at most. At 5h. 24m. 51s. a.m. its right ascension was 9h. 45m. 46.61s., with 0° 53' 36" south declination.

At Adelaide the comet was remarked from the observatory on the morning of September 9, but Mr. Todd reports that a police-constable had seen it a few mornings previously.

Prof. Riccò observed it at 11 a.m. on September 22, with the Palermo refractor of 0.25 m. aperture; there was a trace of a tail towards the south-west. At the same hour on September 23 Prof. Millosevich saw it at Rome, and describes it as "un focchetto di lana disegualmente illuminato."

It appears by no means improbable that with our larger telescopes the comet may be visible till the end of the year, or later. About the time of new moon, or at midnight on January 8, its place will be in R.A. 6h. 53m., with 23° south declination, distant from the earth 2.21, and from the sun 2.57, so that it will be upon the meridian at 1h. 40m. p.m., with an altitude of more than 15° at Greenwich.

With regard to the distinguishing letter which has been attached to the comet in this column, Mr. T. W. Backhouse writes from Sunderland:—"Surely it is a mistake to call the present comet 'Comet *b* 1882.' Is not Well's comet *a*; the comet seen in the eclipse, *b*; the great comet, *c*; Barnard's comet, *d*; and Schmidt's, *e*?" On this point we should reply that the main or indeed only reason for attaching letters to comets as they are discovered is to afford a ready means of distinguishing them *while they are under observation*: when the orbits are catalogued the comets appear as I., II., III., &c., of a particular year. The comet of May 18 was only seen for a minute during the totality of the eclipse, having been looked for unsuccessfully morning and evening subsequently, at least by M. Trepied. It is not likely to be mentioned except in connection with the eclipse, and there is, consequently, no apparent utility in assigning a letter to it. We may take the opportunity to remark that M. Trepied, who did not regard this object as a comet while he had it in view, has informed us in conversation within the last fortnight that he is now quite convinced of its cometary nature.

THE NOVEMBER METEORS.—The first comet of 1866, in the track of which the periodical meteors of November are found to move, has probably just passed the aphelion point of its orbit, which is distant from the sun 19.673, the earth's mean distance being taken as unity. It may be interesting to note the character of the shower under this condition, should it be repeated

when the earth arrives at the descending node of the comet's orbit on the evening of November 13.

On the morning of October 23, when the great comet was so favourably viewed in the vicinity of London, a number of bright meteors diverged from a point not far from the radiant of the November shower.

### GEOGRAPHICAL NOTES

ACCORDING to the Russian newspaper *Sibir*, the meteorological expedition to the mouth of the Lena has started on board large boats provided with all necessaries for building a house, and for successful wintering. The station will be erected on the Tumanskaya branch of the Lena, if the water is deep enough in this branch to allow the passage of the boats. It is hoped that, with the exception of the three summer months, the reports of the station will reach Yakutsk regularly. They will be sent, first, by M. Jurgens to Bulun; thence they will be forwarded to Nerkhoyansk, where they will be taken up by the post, which will run twice a month instead of once every four months as before. In the summer, the *tundra* being covered with water, messages can be sent only *via* the Lena; they will be taken by the merchants who leave Bulun for Yakutsk, as soon as the ice is melted, and reach Yakutsk in the end of July; another message can be sent with the returning fishermen, who reach Yakutsk in September.

THE *Germania*, which conveyed the German North Polar Expedition to Kingawa in Cumberland Sound, has returned to Hamburg. When the *Germania* left Kingawa on September 6, the observatory was completed, so that observations had already begun. Besides the two larger expeditions sent out by the German Government, Dr. Koch has also been sent to Labrador in order to establish meteorological observatories among the missionary settlements of the Moravian brotherhood. Dr. Koch arrived at Hoffenthal Port on August 10, and was liberally supported by the missionaries. All the stations set down in the programme, viz.: Hoffenthal, Zoar, Nain, Ramah, Hebron, and Obak have now been established. A meteorological station has also been established on the Falkland Islands. It is to form an intermediary between the stations on the South American continent and that on South Georgia, and also to help in rendering more valuable the observations made on board of vessels passing through the neighbouring seas. Capt. Seemann, who was sent to the Falkland Islands by the Deutsche Seewarte, reports that work has begun.

A DESPATCH, dated September 19, has been received in Stockholm from the Swedish Meteorological Expedition at Smith's Observatory, Spitzbergen. It states that observations are being regularly made, and that all was well with the members.

THE November part of Hartleben's "Deutsche Rundschau für Geographie und Statistik" contains articles on land formations in the Sunda district, by Jos. v. Lehnert; on the position of women in the life of peoples, by Dr. M. Geistbeck; on the North Sea according to the investigations of the Norwegian Expedition during the years 1876 to 1878, by Dr. J. Chavanne; on the ethnography of Central Asia, by Prof. Ujfalvy; on the transit of Venus and the solar parallax, by Dr. J. Holetschek; on the hydrography of Africa and the Welle problem, by J. Chavanne. There is a good ethnographical map of Central Asia.

A CATALOGUE of the fine commercial collections in the Oriental Museum in Vienna has been issued, as also a small volume of "Neue Volkswirtschaftliche Studien über Constantinopel und das anliegende Gebiet." In the latter, especially, the ornithologist will find several things to instruct him.

THE Municipal Council of Paris has granted unanimously a gold medal of 120*l.* to M. Savorgnan de Brazza, for his discoveries in Tropical Africa.

LIEUT. BOVE, together with the Italians of the Antarctic Expedition scientific staff, arrived at Genoa all well.

THE well-known Bremen naturalist, Dr. Otto Finsch, to whose travels in Polynesia we recently referred, has just returned to Berlin. During the last six months the traveller was in New Guinea, and instituted anthropological comparisons between the Papuans and the Eastern Melanesians. He is accompanied by a native of New Britain, aged fifteen. His